

Serial # 10/829,088
Examiner: Dillon

Amendments to the Drawings:

The attached sheet of drawings includes change to Fig. 2. The replacement sheet replaces the original sheet showing Fig. 2.

Attachments: Replacement Sheet for Fig. 2.

REMARKS AND ARGUMENTS

1. Portions of the Disclosure and the Best Mode have been modified to address the Examiner's comments. It is believed that these changes do not add new material to the Application, but merely conform one portion of the Disclosure to another portion, as permitted under 37 C.F.R. §1.117.
2. Paragraph 28 has been amended to add a definition of "passageway 17" in a manner consistent with claims 1 and 18. The applicant may rely on the original claims to establish disclosure, in accordance with MPEP § 608.01(l). The conveyance direction through passageway 17 in the preferred embodiment is made explicit, consistent with the pre-existing definitions of inlet end 14 and discharge end 16.
3. These changes do not add new material to the Claims or Specification, but merely restate in a more clear and consistent manner material which was described, disclosed and claimed in the original version. These changes conform one part of the Application to another, and are therefore permissible under the terms of 37 C.F.R. §1.117. Applicant hereby requests further examination and reconsideration of the Application, in view of the foregoing amendments.
4. The Examiner has objected to the drawings under 37 C.F.R. §1.83(a), stating that the drawings must show the conveyance direction and the "passageway" of Claims 1 and 18. Fig. 2 has been amended to add an arrow showing the conveyance direction, consistent with the inlet end 14 and discharge end 16 already shown on the drawings. Also, reference 17 has been added to point out the passageway of Claims 1 and 18, consistent with the wording of Paragraph 28. This drawing has been prepared and is submitted with a request for addition. This drawing does not add new matter, but merely clarifies the device as originally claimed, and conforms to the rest of the Specification.
5. The Examiner objected to two Claims numbered 26. These Claims have been canceled and new Claims 31 and 32 have been submitted. Claim 31 is identical to the first claim numbered 26, and claim 32 is identical to the second claim numbered 26. This is not new matter but merely renames the previous Claims.
6. The Examiner has objected to Claims 1-30 under 35 U.S.C. §112, first paragraph for failing to teach on skilled in the art through which passage material is being conveyed. Referring to Paragraph 28 and Figs. 1 and 2, accelerator tube 10 is specified as formed of a conical tube 12 with a larger inlet end 14 and a smaller discharge end 16. One skilled in the art will understand that a tube with an inlet end and an outlet end conveys material from the inlet to the outlet end through a passage formed by the interior of the tube. Referring to Paragraph 29 and Figs. 3 and 4, a housing is formed of right housing half 30 and left housing half 32. Each housing half is provided with an inlet sealing collar 36 and an outlet sealing collar 38 which seal against inlet

flange 18 and outlet flange 22 respectively. When the housing halves 30 and 32 are closed, the collars 36 and 38 seal against flanges 18 and 22, providing no passageway for material. Thus, one skilled in the art will understand that material must flow through the interior of tube 10, rather than outside of tube 10 and between tube 10 and housing halves 30 and 32.

7. Even so, Paragraph 28 and Fig. 2 have been amended as described in §§1 and 4 to clarify that material is conveyed through the interior of tube 10, by referencing the interior of tube 10 as passageway 17.

8. The Examiner has objected to Claims 1-30 under 35 U.S.C. §112, second paragraph, in regard to Claims 1 and 18, because “passageway there-through” fails to make those structural features which constitute the transport region clear. Paragraph 28 and Fig. 2 have been amended as described in §§1 and 4 to clearly show that “passageway” refers to the interior of tube 10, by referencing it as passageway 17. Claims 1-3, 8, 12-16, 18-20, 25 and 27-30 have been amended to reference the accelerator tube in a manner consistent with the Specification.

9. Theses changes do not add new material, but instead conform one part of the Application with other parts, and reword portions of the Application for clarity, as requested by the Examiner.

10. The Examiner has rejected Claims 1 through 30 under 35 U.S.C. §103(a) as being unpatentable over Mendenhall '397 or Mendenhall '755, in view of Mendenhall '141 or Niklason '624. Prior to discussing the references, Applicant will first discuss the general novelty of the present invention and its non-obviousness over the references. Referring to specification Paragraph 29 and Claims 1 and 18, the present invention comprises a housing configured to receive an accelerator tube 10 in a spaced relationship to the inside surface of the housing. In the preferred embodiment, the housing comprises two halves, right half 30 and left half 32. The accelerator tube 10 is made of material that is flexible enough to allow passage of oversized uncut food pieces in order to minimize plugging problems. The space between the flexible accelerator tube 10 and the inside surface of the housing halves 30 and 32 allows accelerator tube 10 to flex without impinging on the inside surface of the housing halves. Paragraph 32 explains that the interior contour of the housing may be altered as long as sufficient space is left between accelerator tube 10 and the interior of the housing. Referring to specification Paragraph 27, Fig. 4, and Claims 8 and 31, the optional reinforcing ribs fit within the space between the accelerator tube 10 and the housing halves 30 and 32. The space between the accelerator tube and the housing minimizes plugging problems, a novel and unexpected result.

11. Nikalson '624 teaches the use of tapering blades for automatically eviscerating fish. The present invention is directed to a different purpose: aligning objects, such as potatoes, before they enter the slicing phase of processing. Nikalson also teaches a conduit spaced inside a casing; but, both the conduit and the casing are rigid and are preferably made of stainless steel. The combination of casing and conduit increase rigidity and the likelihood of plugging, the opposite result of the present invention.

12. Mendenhall '141 teaches a rigid tubular housing with a flexible liner, but the liner must snugly engage the interior surface of the housing. In contrast, the accelerator tube of the present invention is spaced away from the housing, allowing for considerably more flexibility. Mendenhall '141 also teaches the use of ribs; however, the ribs are arranged down the length of the tube and are used to position the potato and increase the flexibility of the liner while the liner maintains contact with the housing. In contrast, the present invention uses ribs circumvolving the tube to strengthen the tube.

13. Mendenhall '755 teaches an accelerator tube comprising a flexible tube liner in contact with and supported by a rigid cradle. The cradle is used to contain and thereby prevent deformation of the tube liner under pressure; thus, Mendenhall '755 teaches away from the present invention, where the flexible accelerator tube is spaced away from the interior surface of the housing.

14. Similarly, Mendenhall '397 teaches an accelerator tube comprising a flexible tube liner in contact with and supported by a rigid cradle, with the same result as Mendenhall '755.

15. None of the above references suggest spacing the liner away from the wall of the supporting housing to increase flexibility to prevent plugging. None of the above references teach reinforcing with ribs circumvolving the accelerator tube.

16. Addressing specifically the §103 rejection of Claims 1-30 over Mendenhall '397 or '755 in view of Niklason '624, Applicant requests reconsideration of this rejection for the following reasons:

- (1) There is no justification in Mendenhall or Niklason, or in any other prior art separate from Applicants' disclosure, which suggests that these references be combined, much less be combined in the manner proposed.
- (2) The proposed combination would not be physically possible or operative to align material such as potatoes.
- (3) Even if Mendenhall and Niklason were to be combined in the manner proposed, the proposed combination would not show all of the novel physical features of Claims 1 through 30 as expressed above.
- (4) These novel physical features of Claims 1-30 produce new and unexpected results and hence are non-obvious and patentable over these references.

17. Addressing specifically the §103 rejection of Claims 1-30 over Mendenhall '397 or '755 in view of Mendenhall '141, Applicant requests reconsideration of this rejection for the following reasons:

- (1) While both Mendenhall '397 and '755 refer to Mendenhall '141, there is no justification which suggests that these references be combined in the manner proposed.
- (2) Even if the Mendenhall references were to be combined in the manner proposed, the proposed combination would not show all of the novel physical features of Claims 1 through 30 as expressed above.
- (3) These novel physical features of Claims 1-30 produce new and unexpected results and hence are non-obvious and patentable over these references.

18. Therefore it is submitted that patentable subject matter is clearly present. If the Examiner agrees, but does not feel that the present claims are technically adequate, Applicant respectfully requests that the Examiner write acceptable claims pursuant to MPEP 707.07(j).

19. Reconsideration of the rejections and objections is requested. Allowance of Claims 1 through 30 is requested. For all the reasons given above, Applicant respectfully submits that the errors in the Specification are corrected, the Claims comply with Section 112, the Claims define over the prior art under §102, and the claimed distinctions are of patentable merit under §103 because of new results provided. Accordingly, Applicant submits that this application is now in full condition for allowance, which action the applicant respectfully requests.

20. For purposes of clarification, no Claim 11 was included in the original application.

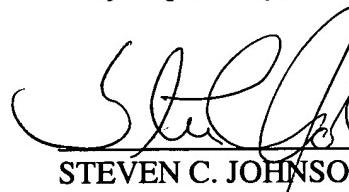
CONCLUSION

If the Examiner feels it would advance the application to allowance or final rejection, the Examiner is invited to telephone the undersigned at the number given below.

Reconsideration and allowance of the application as amended is respectfully requested.

DATED this 27th day of June 2005.

Very respectfully,



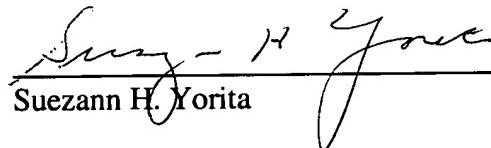
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CERTIFICATE OF MAILING

I HEREBY CERTIFY that this correspondence is being deposited with the United States Postal Service on the below date as first class mail in an envelope addressed to:

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DATE: June 27, 2005.



Suezann H. Yorita